

0300

#4



OIEP

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/079,185

DATE: 03/18/2002
TIME: 17:54:55

Input Set : A:\079185.txt
Output Set: N:\CRF3\03182002\J079185.raw

ENTERED

3 <110> APPLICANT: Crooke, Stanley T.
5 <120> TITLE OF INVENTION: Human RNase III And Compositions And Uses Thereof
7 <130> FILE REFERENCE: ISIS5030
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/079,185
C--> 9 <141> CURRENT FILING DATE: 2002-02-20
9 <150> PRIOR APPLICATION NUMBER: 09/479,783
10 <151> PRIOR FILING DATE: 2000-01-07
12 <150> PRIOR APPLICATION NUMBER: 08/870,608
13 <151> PRIOR FILING DATE: 1997-06-06
15 <150> PRIOR APPLICATION NUMBER: 08/659,440
16 <151> PRIOR FILING DATE: 1996-06-06
18 <150> PRIOR APPLICATION NUMBER: 09/900,425
19 <151> PRIOR FILING DATE: 2001-07-06
21 <160> NUMBER OF SEQ ID NOS: 36
23 <170> SOFTWARE: PatentIn version 3.1
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 4764
27 <212> TYPE: DNA
28 <213> ORGANISM: Homo sapiens
30 <400> SEQUENCE: 1
31 ctgtcttgggt acctgcggta gtagcctggc tttgctctga cggcgatctc gcggcccagag 60
33 agccttttat aggttgcttt tcccggggat gtgaaggata cagaaatgac tgtgaatcaa 120
35 cccatatcat caaggagctg ataattctagt ggaagagtta gacgtgtgca tacttacta 180
37 tgatatgagg cagtctctga gcttatattc tctgtggaag atgtgacata tccaggcgga 240
39 acatcatgat gcagggaac acatgtcaca gaatgtcggt ccacccggga cgagggcgtc 300
41 cccgaggacg aggaggacat ggagccagac cctcagcacc atcctttagg ccccaaaatc 360
43 tgaggetgct tcaccctcag cagcctcctg tgcaatatca atatgaacct ccaagtgcc 420
45 cttccaccac tttctcaaac tctccagccc ccaattttct cctccacga ccagacttg 480
47 tacccttccc cccaccatg cctccgtcag cgcaaggccc tcttcccccc tgcccaatca 540
49 ggccgccttt ccccaaccac cagatgaggc accccttccc agttcctcct tgttttcctc 600
51 ccatgccacc accaatgcct tgtcctaata acccccaggt ccctggggca cctcctggac 660
53 aaggcacttt ccccttcagt atgccccctc cctccatgcc tcatcccccg cccctccag 720
55 tcatgccgca gcagggttaat tatcagtacc ctccgggcta ttctcaccac aacttcccac 780
57 ctcccagttt taatagtttc cagaacaacc ctagtctctt cctgcccagt gctaataaca 840
59 gcagtagtcc tcatttcaga catctccctc catacccact cccaaaggct cccagtgaga 900
61 gaaggtcccc agaaaggctg aaacactatg atgaccacag gcaccgagac cacagtcatg 960
63 ggcgaggtga gaggcacatg tccctggatc ggcgggagcg aggccgcagt cccgacagga 1020
65 gaagacaaga cagccgggtac agatctgatt atgaccgagg gggagagaca caggcatcga gacaaccgaa 1140
67 gcagctacga acggagcaga gagecgagaac gggagagaca gagatctgga aggagttacg 1200
69 gatcaccatc tctggaaaagg tctacaaaaa aagagtataa gagatctgga aggagttacg 1260
71 gtttatcggt tgttcctgaa cctgctggat gcacaccaga attacctggg gagattatta 1320
73 aaaatacaga ttcttggggc ccaccctcctg agattgtgaa tcatcgctcc ccaagtaggg 1380
75 agaagaagag agctcgttgg gaggaagaaa aagaccgttg gagtgacaac cagagttctg

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/079,185

DATE: 03/18/2002
TIME: 17:54:55

Input Set : A:\079185.txt

Output Set: N:\CRF3\03182002\J079185.raw

77	gcaaagacaa	gaactatacc	tcaatcaagg	aaaaagagcc	cgaggagacc	atgcctgaca	1440
79	agaatgagga	ggaagaagaa	gaacttctta	agcctgtgtg	gattcgatgc	actcattcag	1500
81	aaaactacta	ctccagtgac	cccatggatc	aggtgggaga	ttctacagt	gttggaaacga	1560
83	gtaggcttcg	tgaactatat	gacaaatttg	aggaggagtt	ggggagcagg	caagaaaagg	1620
85	ccaaagctgc	tcggcctccg	tgggaacctc	caaagacgaa	gctcgatgaa	gatttagaga	1680
87	gttcacagtga	atccgagtg	gagtctgatg	aggacagcac	ctgttctagc	agctcagact	1740
89	ctgaagtttt	tgacgttatt	gcagaaatca	aacgcaaaaa	ggcccaccct	gaccgacttc	1800
91	atgatgaact	ttggtacaac	gatccaggcc	agatgaatga	tggaccactc	tgcaaatgca	1860
93	gcgcaaaggc	aagacgcaca	ggaattaggg	acagcattta	tcctggagaa	gaggccatca	1920
95	agccctgtcg	tcctatgacc	aacaatgctg	gcagactttt	ccactaccgg	atcacagtct	1980
97	ccccgcctac	gaacttttta	actgacaggg	caactgttat	agaatacgat	gatcacgagt	2040
99	atatctttga	aggattttct	atgtttgcac	atgccccctt	gaccaatatt	ccactgtgta	2100
101	aagtaattag	attcaacata	gactacacga	ttcatttcat	tgaagagatg	atgccggaga	2160
103	atttttgtgt	gaaagggctt	gaactctttt	cactgttctt	attcagagat	attttggat	2220
105	tatatgactg	gaatcttaaa	ggtcctttgt	ttgaagacag	ccctccctgc	tgcccaagat	2280
107	ttcatttcat	gccacgtttt	gtaagatttc	ttccagatgg	aggaaaggaa	gtgctgtcca	2340
109	tgcaccagat	tctcctgtac	ttgttaaggt	gcagcaaagc	cctggtgcct	gaggaggaga	2400
111	ttgccaatat	gcttcagtg	gaggagctgg	agtggcagaa	atatgcagaa	gaatgcaaa	2460
113	gcatgattgt	taccaaccct	gggacgaaac	caagctctgt	ccgtatcgat	caactggatc	2520
115	gtgaacagtt	caaccccgat	gtgattactt	ttccgattat	cgtccacttt	gggatacgcc	2580
117	ctgcacagtt	gagttatgca	ggagaccac	agtacaaaa	actgtggaag	agttatgtga	2640
119	aacttcgcca	cctcctagca	aatagtccca	aagtcaaaaa	aactgacaaa	cagaagctgg	2700
121	cacagagggg	ggaagccctc	caaaaaatac	ggcagaagaa	tacaatgaga	cgagaagtaa	2760
123	cggtggagct	aagtagccaa	ggattctgga	aaactggcat	ccgttctgat	gtctgtcagc	2820
125	atgcaatgat	gctacctgtt	ctgacccatc	atatccgcta	ccaccaatgc	ctaattgcatt	2880
127	tggacaagtt	gataggatat	actttccaag	atcgttgtct	gttgacgtg	gccatgactc	2940
129	atccaagtca	tcatttaaat	tttggaaatga	atcctgatca	tgccaggaat	tcattatcta	3000
131	actgtggaat	tcggcagccc	aaatacggag	acagaaaagt	tcatcacatg	cacatgcgga	3060
133	agaaagggat	taacaccttg	ataaatatca	tgtcacgcct	tggccaagat	gacccaactc	3120
135	cctcgaggat	taaccacaat	gaacggttgg	aattcctggg	tgatgctgtt	gttgaatttc	3180
137	tgaccagcgt	ccatttgtac	tatttgtttc	ctagtctgga	agaaggagga	ttagcaacct	3240
139	atcggaactgc	cattgttcag	aatcagcacc	ttgccatgct	agcaaagaaa	cttgaactgg	3300
141	atccatttat	gctgtatgct	cacgggcctg	acctttgtag	agaatcggac	cttcgacatg	3360
143	caatggccaa	ttgttttgaa	gcgttaatat	gagctgttta	cttggaggga	agcctggagg	3420
145	aagccaagca	gttatttgga	cgcttgcctt	ttaatgatcc	ggacctgcgc	gaagtctggc	3480
147	tcaattatcc	tctccaccca	ctccaactac	aagagccaaa	tactgatcga	caacttattg	3540
149	aaacttctcc	agttctacaa	aaacttactg	agtttgaaga	agcaattgga	gtaattttta	3600
151	ctcatgttcg	acttctggca	agggcattca	cattgagaac	tgtgggattt	aacctatctga	3660
153	ccctaggcca	caatcagaga	atggaattcc	taggtgactc	cataatgcaa	ctggttagcca	3720
155	cagagtactt	attcattcat	ttcccagatc	atcatgaagg	acacttaact	ttgttgcgaa	3780
157	gctcttttgt	gaataataga	actcaggcca	aggtagcggg	ggagctgggc	atgcaggagt	3840
159	acgccataac	caacgacaag	accaagaggc	ctgtggcgct	tcgcaccaag	accttggcgg	3900
161	accttttgga	atcatttat	gcagcgctgt	acactgataa	ggatttggaa	tatgttcata	3960
163	ctttcatgaa	tgtctgcttc	tttccacgat	tgaaagaatt	cattttgaa	caggattgga	4020
165	atgaccccaa	atcccagctt	cagcagtggt	gcttgacact	taggacagaa	ggaaaagagc	4080
167	cagacattcc	tctgtacaag	actctgcaga	cagtgggccc	atcccatgcc	cgaacctaca	4140
169	ctgtggctgt	ttatttcaag	ggagaaagaa	taggctgtgg	gaaaggacca	agtattcagc	4200
171	aagcggaat	gggagcagca	atggatgcgc	ttgaaaaata	taattttccc	cagatggccc	4260
173	atcagaagcg	gttcatcgaa	cggaagtaca	gacaagagtt	aaaagaaatg	aggtgggaaa	4320

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/079,185

DATE: 03/18/2002
TIME: 17:54:55

Input Set : A:\079185.txt
Output Set: N:\CRF3\03182002\J079185.raw

```

175 gagagcatca agagagagag ccagatgaga ctgaagacat caagaaataa aggagggcat 4380
177 gcaagtgtgg agtattttact tgctcagtaa ctgtgactgt tgtctattga gacctagcct 4440
179 agttttcctg cagacaatga acgaagtgtg ctcatgaaa taaaatacag agtcaaatcg 4500
181 ctattgttgt tttaatgatac tgttttttagc tggatgggtct ttattacaaa gtattagatt 4560
183 tttcttctat ttaacggaaa acttgacttt ggtgaatgtg cattacttcc ttttattttg 4620
185 ctcttttaaataaataaattc aagaagcata ttctatgtgg aatagatcct gtttttccat 4680
187 ctgtgtccca gattgtgacc ctagactttc aattgacaag taaaaaattg actttactag 4740
189 taaaaaaaaa aaaaaaaaaa aaaa 4764
192 <210> SEQ ID NO: 2
193 <211> LENGTH: 1374
194 <212> TYPE: PRT
195 <213> ORGANISM: Homo sapiens
197 <400> SEQUENCE: 2
199 Met Met Gln Gly Asn Thr Cys His Arg Met Ser Phe His Pro Gly Arg
200 1 5 10 15
203 Gly Cys Pro Arg Gly Arg Gly Gly His Gly Ala Arg Pro Ser Ala Pro
204 20 25 30
207 Ser Phe Arg Pro Gln Asn Leu Arg Leu Leu His Pro Gln Gln Pro Pro
208 35 40 45
211 Val Gln Tyr Gln Tyr Glu Pro Pro Ser Ala Pro Ser Thr Thr Phe Ser
212 50 55 60
215 Asn Ser Pro Ala Pro Asn Phe Leu Pro Pro Arg Pro Asp Phe Val Pro
216 65 70 75 80
219 Phe Pro Pro Pro Met Pro Pro Ser Ala Gln Gly Pro Leu Pro Pro Cys
220 85 90 95
223 Pro Ile Arg Pro Pro Phe Pro Asn His Gln Met Arg His Pro Phe Pro
224 100 105 110
227 Val Pro Pro Cys Phe Pro Pro Met Pro Pro Pro Met Pro Cys Pro Asn
228 115 120 125
231 Asn Pro Pro Val Pro Gly Ala Pro Pro Gly Gln Gly Thr Phe Pro Phe
232 130 135 140
235 Met Met Pro Pro Pro Ser Met Pro His Pro Pro Pro Pro Pro Val Met
236 145 150 155 160
239 Pro Gln Gln Val Asn Tyr Gln Tyr Pro Pro Gly Tyr Ser His His Asn
240 165 170 175
243 Phe Pro Pro Pro Ser Phe Asn Ser Phe Gln Asn Asn Pro Ser Ser Phe
244 180 185 190
247 Leu Pro Ser Ala Asn Asn Ser Ser Ser Pro His Phe Arg His Leu Pro
248 195 200 205
251 Pro Tyr Pro Leu Pro Lys Ala Pro Ser Glu Arg Arg Ser Pro Glu Arg
252 210 215 220
255 Leu Lys His Tyr Asp Asp His Arg His Arg Asp His Ser His Gly Arg
256 225 230 235 240
259 Gly Glu Arg His Arg Ser Leu Asp Arg Arg Glu Arg Gly Arg Ser Pro
260 245 250 255
263 Asp Arg Arg Arg Gln Asp Ser Arg Tyr Arg Ser Asp Tyr Asp Arg Gly
264 260 265 270
267 Arg Thr Pro Ser Arg His Arg Ser Tyr Glu Arg Ser Arg Glu Arg Glu
268 275 280 285

```

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/10/079,185

DATE: 03/18/2002
 TIME: 17:54:55

Input Set : A:\079185.txt
 Output Set: N:\CRF3\03182002\J079185.raw

```

271 Arg Glu Arg His Arg His Arg Asp Asn Arg Arg Ser Pro Ser Leu Glu
272      290      295      300
275 Arg Ser Tyr Lys Lys Glu Tyr Lys Arg Ser Gly Arg Ser Tyr Gly Leu
276 305      310      315      320
279 Ser Val Val Pro Glu Pro Ala Gly Cys Thr Pro Glu Leu Pro Gly Glu
280      325      330      335
283 Ile Ile Lys Asn Thr Asp Ser Trp Ala Pro Pro Leu Glu Ile Val Asn
284      340      345      350
287 His Arg Ser Pro Ser Arg Glu Lys Lys Arg Ala Arg Trp Glu Glu Glu
288      355      360      365
291 Lys Asp Arg Trp Ser Asp Asn Gln Ser Ser Gly Lys Asp Lys Asn Tyr
292      370      375      380
295 Thr Ser Ile Lys Glu Lys Glu Pro Glu Glu Thr Met Pro Asp Lys Asn
296 385      390      395      400
299 Glu Glu Glu Glu Glu Glu Leu Leu Lys Pro Val Trp Ile Arg Cys Thr
300      405      410      415
303 His Ser Glu Asn Tyr Tyr Ser Ser Asp Pro Met Asp Gln Val Gly Asp
304      420      425      430
307 Ser Thr Val Val Gly Thr Ser Arg Leu Arg Asp Leu Tyr Asp Lys Phe
308      435      440      445
311 Glu Glu Glu Leu Gly Ser Arg Gln Glu Lys Ala Lys Ala Ala Arg Pro
312      450      455      460
315 Pro Trp Glu Pro Pro Lys Thr Lys Leu Asp Glu Asp Leu Glu Ser Ser
316 465      470      475      480
319 Ser Glu Ser Glu Cys Glu Ser Asp Glu Asp Ser Thr Cys Ser Ser Ser
320      485      490      495
323 Ser Asp Ser Glu Val Phe Asp Val Ile Ala Glu Ile Lys Arg Lys Lys
324      500      505      510
327 Ala His Pro Asp Arg Leu His Asp Glu Leu Trp Tyr Asn Asp Pro Gly
328      515      520      525
331 Gln Met Asn Asp Gly Pro Leu Cys Lys Cys Ser Ala Lys Ala Arg Arg
332      530      535      540
335 Thr Gly Ile Arg His Ser Ile Tyr Pro Gly Glu Glu Ala Ile Lys Pro
336 545      550      555      560
339 Cys Arg Pro Met Thr Asn Asn Ala Gly Arg Leu Phe His Tyr Arg Ile
340      565      570      575
343 Thr Val Ser Pro Pro Thr Asn Phe Leu Thr Asp Arg Pro Thr Val Ile
344      580      585      590
347 Glu Tyr Asp Asp His Glu Tyr Ile Phe Glu Gly Phe Ser Met Phe Ala
348      595      600      605
351 His Ala Pro Leu Thr Asn Ile Pro Leu Cys Lys Val Ile Arg Phe Asn
352      610      615      620
355 Ile Asp Tyr Thr Ile His Phe Ile Glu Glu Met Met Pro Glu Asn Phe
356 625      630      635      640
359 Cys Val Lys Gly Leu Glu Leu Phe Ser Leu Phe Leu Phe Arg Asp Ile
360      645      650      655
363 Leu Glu Leu Tyr Asp Trp Asn Leu Lys Gly Pro Leu Phe Glu Asp Ser
364      660      665      670
367 Pro Pro Cys Cys Pro Arg Phe His Phe Met Pro Arg Phe Val Arg Phe

```

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/10/079,185

DATE: 03/18/2002
 TIME: 17:54:55

Input Set : A:\079185.txt
 Output Set: N:\CRF3\03182002\J079185.raw

```

368          675          680          685
371 Leu Pro Asp Gly Gly Lys Glu Val Leu Ser Met His Gln Ile Leu Leu
372          690          695          700
375 Tyr Leu Leu Arg Cys Ser Lys Ala Leu Val Pro Glu Glu Glu Ile Ala
376 705          710          715          720
379 Asn Met Leu Gln Trp Glu Glu Leu Glu Trp Gln Lys Tyr Ala Glu Glu
380          725          730          735
383 Cys Lys Gly Met Ile Val Thr Asn Pro Gly Thr Lys Pro Ser Ser Val
384          740          745          750
387 Arg Ile Asp Gln Leu Asp Arg Glu Gln Phe Asn Pro Asp Val Ile Thr
388          755          760          765
391 Phe Pro Ile Ile Val His Phe Gly Ile Arg Pro Ala Gln Leu Ser Tyr
392          770          775          780
395 Ala Gly Asp Pro Gln Tyr Gln Lys Leu Trp Lys Ser Tyr Val Lys Leu
396 785          790          795          800
399 Arg His Leu Leu Ala Asn Ser Pro Lys Val Lys Gln Thr Asp Lys Gln
400          805          810          815
403 Lys Leu Ala Gln Arg Glu Glu Ala Leu Gln Lys Ile Arg Gln Lys Asn
404          820          825          830
407 Thr Met Arg Arg Glu Val Thr Val Glu Leu Ser Ser Gln Gly Phe Trp
408          835          840          845
411 Lys Thr Gly Ile Arg Ser Asp Val Cys Gln His Ala Met Met Leu Pro
412          850          855          860
415 Val Leu Thr His His Ile Arg Tyr His Gln Cys Leu Met His Leu Asp
416 865          870          875          880
419 Lys Leu Ile Gly Tyr Thr Phe Gln Asp Arg Cys Leu Leu Gln Leu Ala
420          885          890          895
423 Met Thr His Pro Ser His His Leu Asn Phe Gly Met Asn Pro Asp His
424          900          905          910
427 Ala Arg Asn Ser Leu Ser Asn Cys Gly Ile Arg Gln Pro Lys Tyr Gly
428          915          920          925
431 Asp Arg Lys Val His His Met His Met Arg Lys Lys Gly Ile Asn Thr
432          930          935          940
435 Leu Ile Asn Ile Met Ser Arg Leu Gly Gln Asp Asp Pro Thr Pro Ser
436 945          950          955          960
439 Arg Ile Asn His Asn Glu Arg Leu Glu Phe Leu Gly Asp Ala Val Val
440          965          970          975
443 Glu Phe Leu Thr Ser Val His Leu Tyr Tyr Leu Phe Pro Ser Leu Glu
444          980          985          990
447 Glu Gly Gly Leu Ala Thr Tyr Arg Thr Ala Ile Val Gln Asn Gln His
448          995          1000          1005
451 Leu Ala Met Leu Ala Lys Lys Leu Glu Leu Asp Pro Phe Met Leu
452          1010          1015          1020
455 Tyr Ala His Gly Pro Asp Leu Cys Arg Glu Ser Asp Leu Arg His
456          1025          1030          1035
459 Ala Met Ala Asn Cys Phe Glu Ala Leu Ile Gly Ala Val Tyr Leu
460          1040          1045          1050
463 Glu Gly Ser Leu Glu Glu Ala Lys Gln Leu Phe Gly Arg Leu Leu
464          1055          1060          1065

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/079,185

DATE: 03/18/2002

TIME: 17:54:56

Input Set : A:\079185.txt

Output Set: N:\CRF3\03182002\J079185.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date